DOCUMENT RESUME

ED 177 086 SO 012 034

AUTHOR Seiferth, Berniece B.; Trampe, Catherine Bice
TITLE Teaching Parallel Lines and Vanishing Points Using Individualized Instruction.
NOTE 15p.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Art Education; Elementary Education; *Fine Arts; Grade 5; Grade 6; *Independent Study; *Individualized Instruction; *Visual Perception

ABSTRACT

This self-instructional package designed for art students in Grades 5 and 6 enables students to decide which set of lines in a group of lines are parallel, to show the vanishing points of several boxes by extending parallel lines, and to increase their desire to draw objects in perspective. Total time involved for the student is approximately thirty minutes to work through the package and 15 minutes for the posttest. The package contains graphic aids to help students examine horizon and eye level perspectives in relation to vanishing points. An answer sheet is also provided. (Author/KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED177086

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Berniece B. Seiferth

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

Teaching Parallel Lines and Vanishing Points Using Individualized Instruction

Berniece Seiferth
Catherine Rice Trampe

SP 012 034

ABSTRACT

TEACHING PARALLEL LINES AND VANISHING POINTS

USING INDIVIDUALIZED INSTRUCTION

Berniece B. Seiferth
Professor, College of Education
Southern Illinois University-Carbondale

Catherine Rice Trampe
Art Teacher, Metropolis, IL

This is a self-instructional package designed for middle school 5th and 6th grade art classes. The total time involved for the student is approximately 30 minutes to work through the package and about 15 minutes for the posttest. This is an attempt to help the students because learning rates are so different.

This particular package could be used for enrichment, remediation or general instruction. Precise instructional objectives have been stated and instructions are clear.

As a result of working through the package, students will be able to (1) decide which set of lines in a group of lines are paralle, (2) show the vanishing points of several boxes by extending parallel lines and (3) increase their desire to draw objects correctly in perspective.

Individualizing Art Instruction

Submitted By Berniece Seiferth
Professor of Education
Southern Illinois University at Carbondale

Catherine Rice Trampe
Art Teacher, Metropolis, IL

For many educators, the idea of utilizing individualized insturction usually brings to mind classes in the content areas, such as social studies, English, or science. However, the self-instructional package can be an extremely valuable tool for fine arts classes as well. It can be used quite effectively in the area of art for teachers with a measure of creativity, initiative and diligence.

The accompanying self-instructional package was designed for middle school 5th and 6th grade art classes. The total time involved for the student is approximately 30 minutes to work through the package and about 15 minutes for the posttest. Some teachers

may be hesitant about introducing a self-instructional package, but it is entirely feasible and it has been found that students really enjoy working through their own instruction. In this author's opinion, the enclosed package is not only educational but would afford much pleasure and satisfaction to the students using it. "Back to the basics" seems to be an often repeated slogan at the present time, but all children cannot be put into one mold. Learning rates of students are too different for this.

This particular package could be used for enrichment, remediation or general insturction. Precise instructional objectives have been stated, and frequent opportunities have been provided for the students to check their achievement in their mastery. Instructions are clear, vocabulary is appropriate and the drawing appears to be enjoyable for most students. The package could be used for more advanced grades also.

PARALLEL LINES AND VANISHING POINTS

Objectives upon completion of this package

You will be able to: decide which set of lines in a group of lines are parallel .

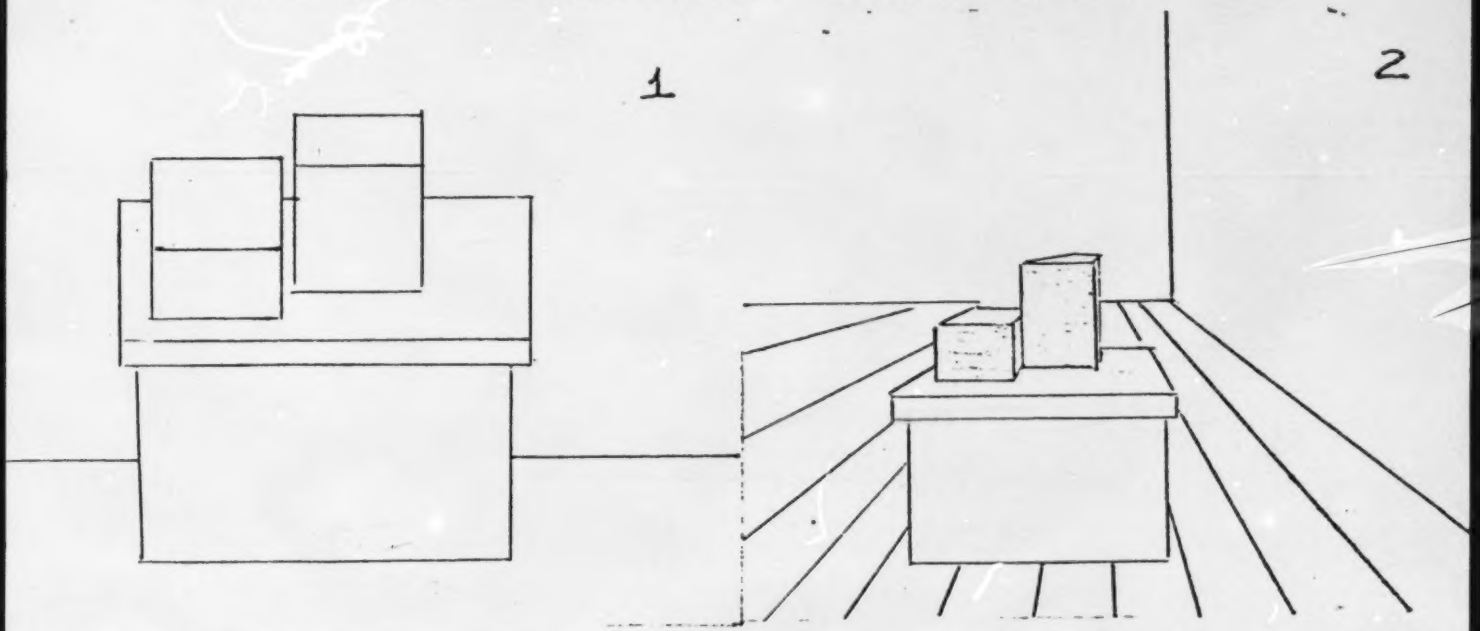
show the vanishing points of several boxes by extending parallel lines.

increase your desire to draw objects correctly in perspective, because you will be on the road to knowing how !

SIU

Instructional Activities

Which picture below looks the most real to you? (1, 2)

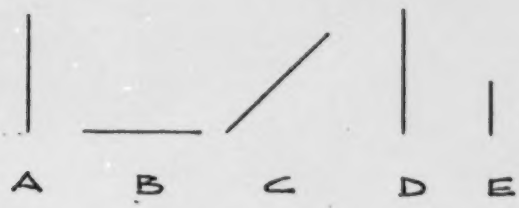


Why do you think so? It's usually because the second picture looks the most like real boxes that you might see on a table if you walked into our room. There are reasons why the second picture looks the way it does.

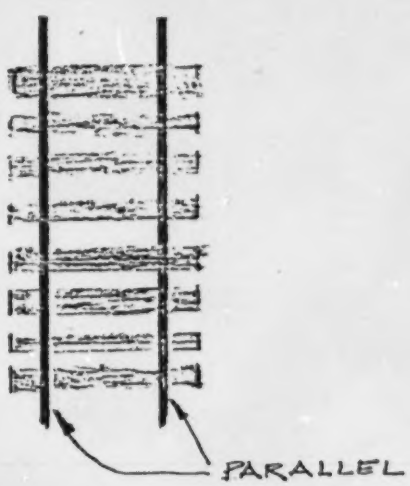
Using rules and planning are the main reasons that the second picture looks better. Just like writing a sentence, drawing has rules and an order of doing things. In this package we will explore some terms and see how they are used to help you to draw.

Parallel lines are any two or more lines which if extended will never meet or come together in real life. The first step in discovering vanishing points is to decide which lines in a picture of subject are parallel.

Which lines below are parallel to each other ? _____

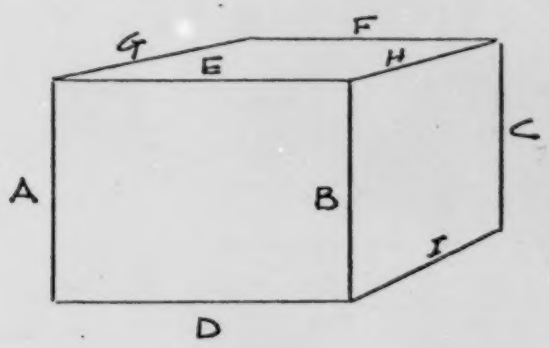


SIU

Check your answer with the answer sheet. If you did not choose correctly, think of railroad tracks. The tracks must be parallel to each other or the trains wheels would not stay on them. Look at the picture below. This is the way railroad tracks would look if you were looking down on them from an airplane. The tracks in reality can never come together.

Remember, parallel lines are any two or more lines which if extended will never meet or come together in real life. However, when you look at a box sitting on a table, the parallel lines may look a little less than exactly parallel. Let's look at some boxes.

Which lines in this picture would be parallel in real life ?

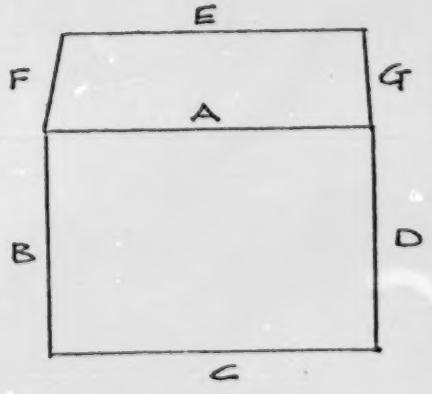
_____ ; _____ ; _____



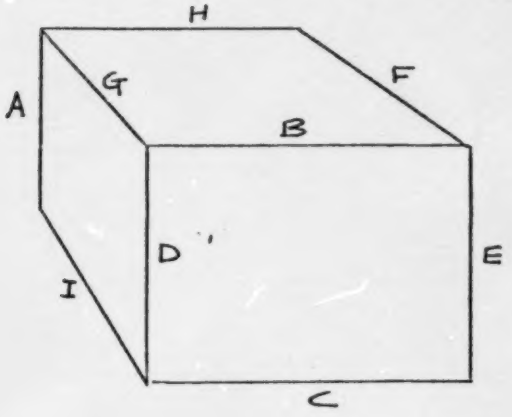
SIU

Check your answeres with the answer sheet. Now, try again. Which lines in this picture would be parallel in real life ?

_____ ; _____ ; _____

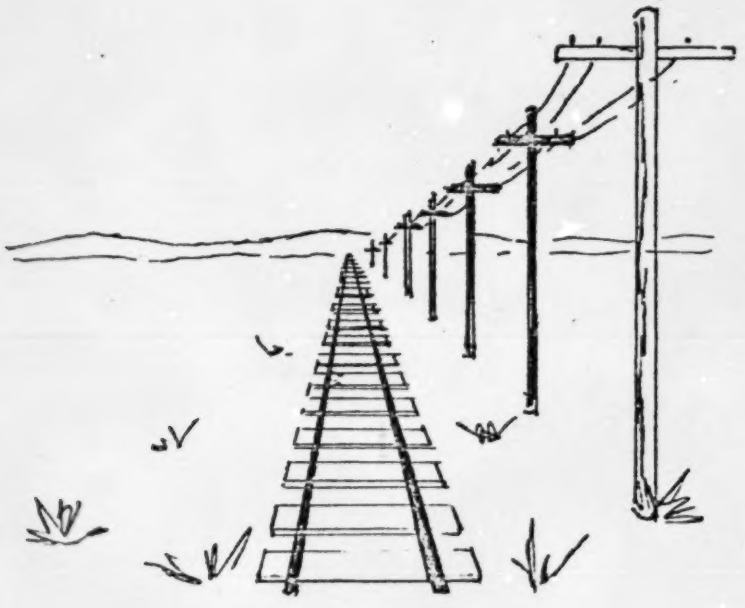


Check your answeres with the answer sheet. If you are still having problems, try the next cube and check your answers after you have reviewed what parallel lines are .



SIU

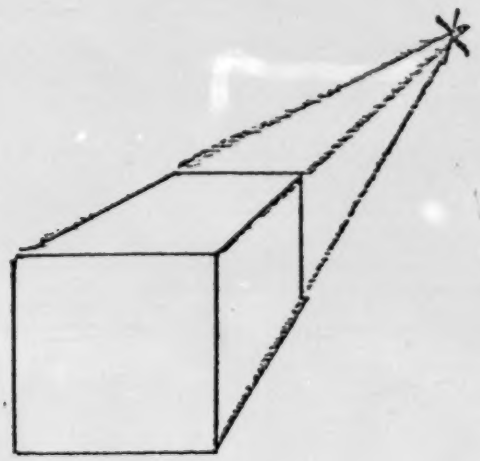
Now that you understand parallel lines, maybe you have noticed something else about railroad tracks. Have youever stood on the tracks and looked straight down them ? What appears to be happening ? The tracks seem to be coming together somewhere in the distance. Look at the picture below.



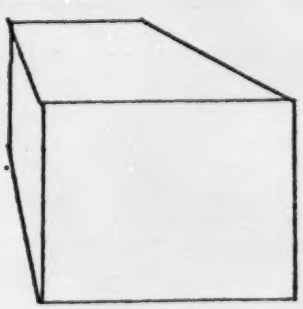
Any two or more lines that are in reality parallel to one another, if extended, will appear to come together or meet at a point. This point is called the VANISHING POINT. Look at the picture of the railroad tracks again. Make an X where the vanishing point for the tracks would be. Check yourself by turning to the answer sheet.

Any time that you look at a cube, or a box which is facing you, the sides will appear to get smaller the further away they are from you. The side <u>facing</u> you will not do this.

If you extended the sides of a box drawn in perspective by drawing a line, the two lines of the sides going away from you will meet. Look below.



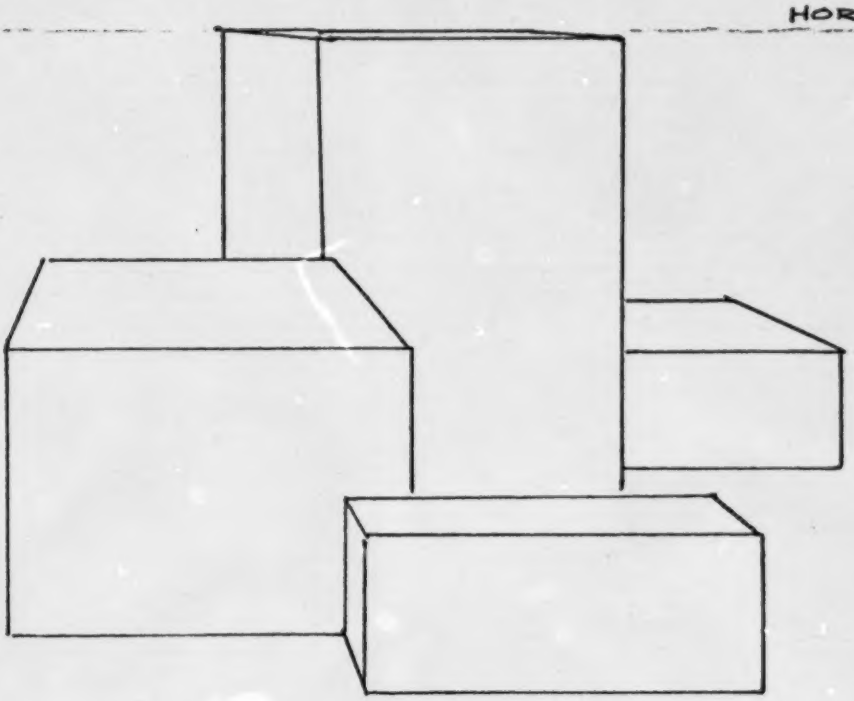
Now, you try. Take a ruler and a pencil and extend the lines of the sides of this box which are further away from you. Turn to the answer sheet to check yourself.



But... the world around you is not always directly in front of you.
Many times the box or boxes will be above your eyes,
below your eyes,
or to one side of your eyes.
Look at the picture on the next page. Notice that the lines come together at the EYE LEVEL of the person. You see things differently depending on where your eyes and head are.

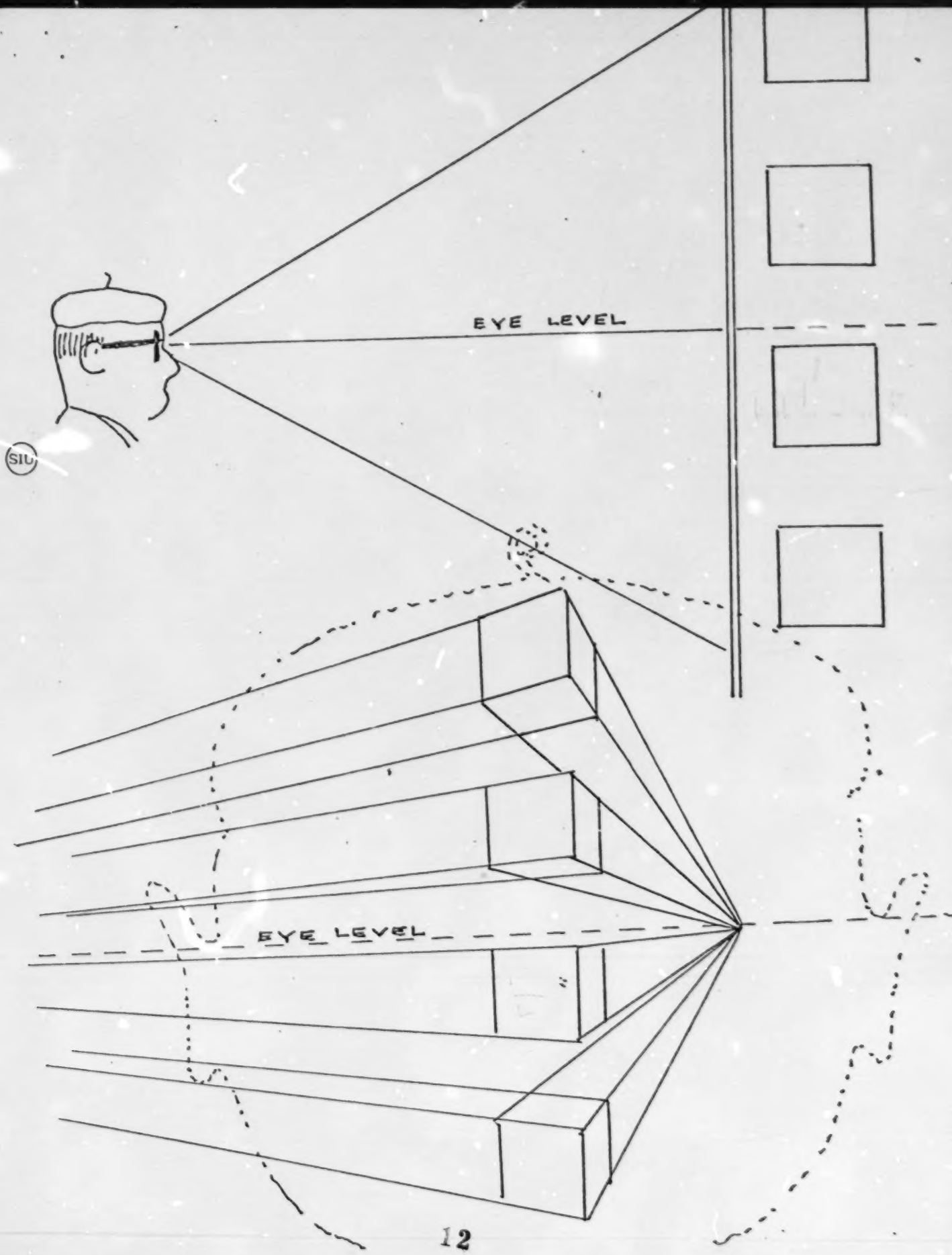
Extend the parallel lines on the boxes below until they meet.

HORIZON LINE



Where do all of the parallel lines meet that are going away from you ?

_____ (check your answer on the answer sheet)


EYE LEVEL
EYE LEVEL

Review what we have learned about vanishing points, parallel lines, and eye level. These are some things that will put you on the road to drawing well. If you have mastered vanishing points, the post test will be a breeze ! Let's see what you can do.

Post test

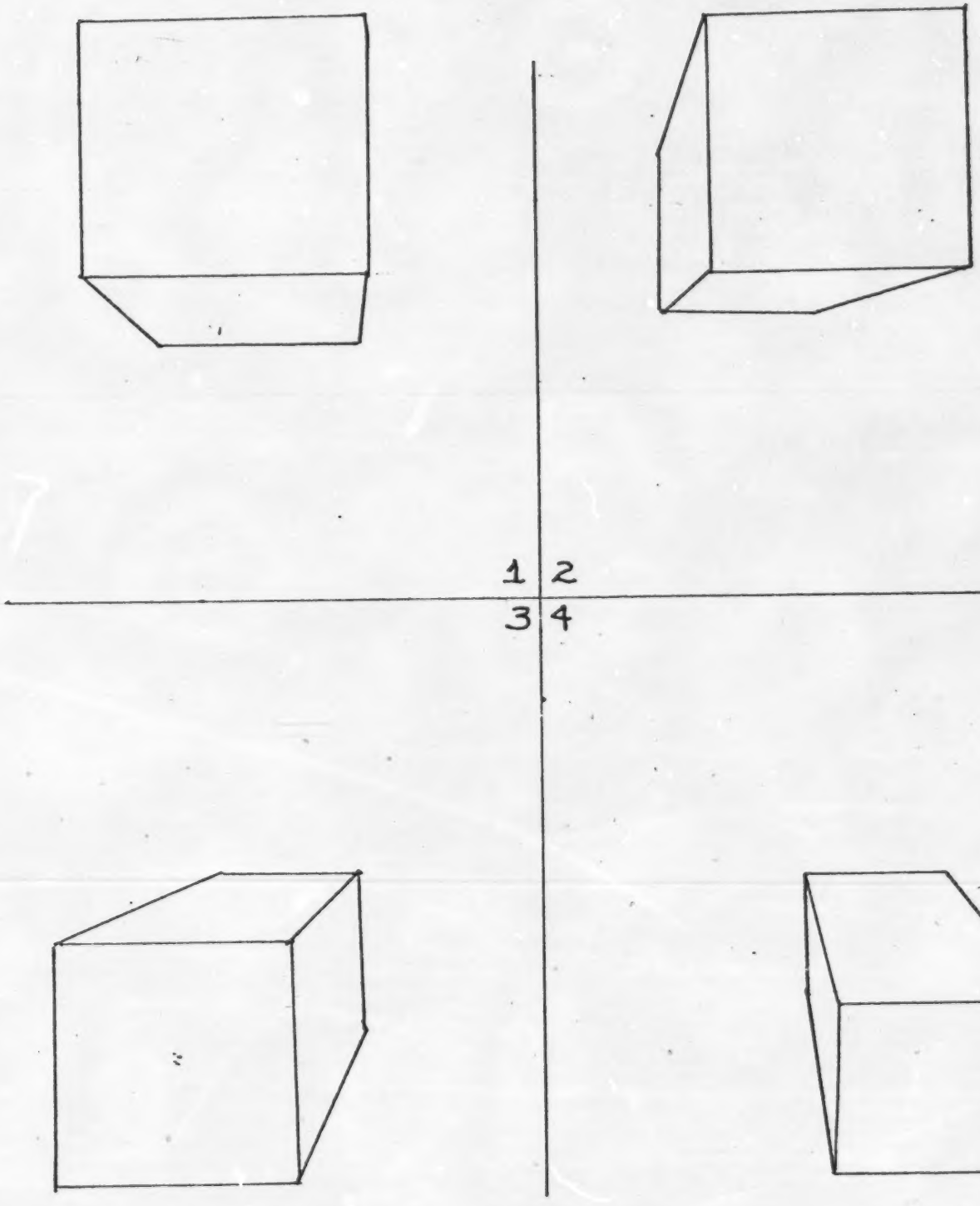
1. On the next page there are some cubes, or boxes. Extend the vanishing points of the parallel lines that are going away from you. Show me where the vanishing point is by drawing an X over it.

2. Do you think that you will be able to improve your drawing by following these things that we have discussed ?

_____

3. Did you enjoy learning about vanishing points ?

_____


1
2
3
4

ANSWER SHEET

Which picture looks the most real to you ? 2

Which lines are parallel to each other ? A,D,E

Which lines are parallel in real life?

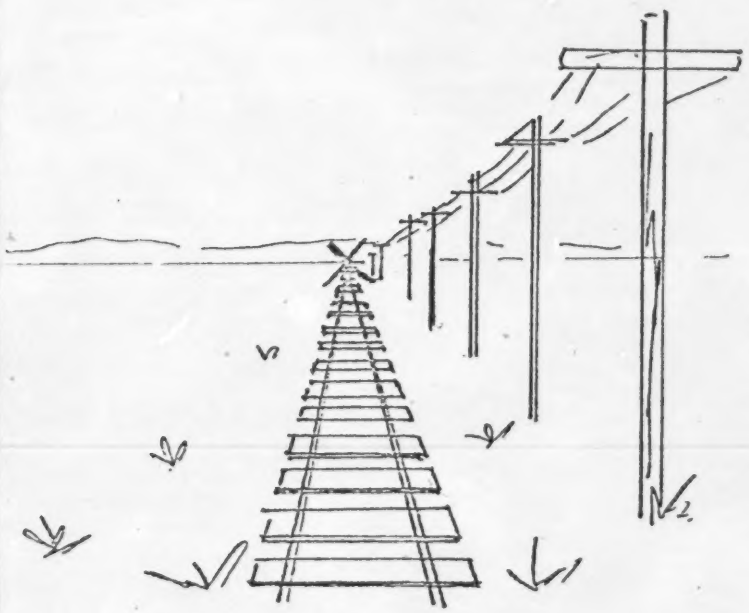
(a) A,B,C,
D,E,F
G,H,I
each of thse sets are parallel to each other

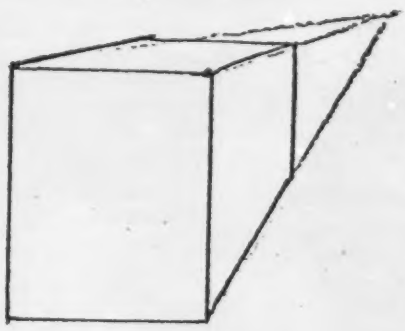
(b) A,E,C ARE PARALLEL
B,D ARE PARALLEL
F,G ARE PARALLEL

(c) A,D,E ARE PARALLEL
H,B,C ARE PARALLEL
G,F,I ARE PARALLEL

SIU

Make an X where the vanishing point is for the railroad tracks.





Take a ruler and a penciland extend the lines of the sides of this box which are further away from you.

Where do all of the parallel lines meet that are going away from you ? ON THE HORIZON LINE